Avid Configuration Guidelines
HP XW8600 Dual Quad-Core CPU Workstation
Symphony / Media Composer / NewsCutter

1.) Qualified Operating Systems / Service Packs for Avid Client Editing Applications, Hardware and Shared-Storage connectivity with the HP XW8600:

- **Supported: Microsoft® Windows Vista Business 64-bit Edition (SP1 / SP2)**
- **Supported: Microsoft® Windows Vista Business 32-bit Edition (SP1 / SP2) (Only with releases prior to Media Composer 5.0, Symphony 5.0 and NewsCutter 9.0)**
- **Supported: Microsoft® Windows Vista Ultimate 64-bit Edition (SP1 / SP2)**
- **Supported: Microsoft® Windows XP Professional 32-bit Edition (SP2 / SP3)**
- **Supported: Microsoft® Windows 7 Professional 64-bit Edition**

- **Not Supported - Microsoft® Windows XP 64-bit (any version)**
- **Not Supported - Microsoft® Windows Vista 32-bit Home or Ultimate editions**
- **Not Supported - Microsoft® Windows 7 – any 32-bit version, or any version of Home, Ultimate or Enterprise editions.**

Note regarding Service packs:

Latest Service Pack releases are recommended for all Avid qualified software releases for the XW8600. Latest Vista and XP Service Pack releases ***are mandatory for Media Composer 5.0, Symphony 5.0 and NewsCutter 9.0***

- SP2 for Vista O.S.
- SP3 for XP O.S.
- SP1 for Win7 64-bit (formally supported starting with M/C 5.5.2, Symphony 5.5.2, NewsCutter 9.5.2 releases)

2.) Qualified Avid Editing Applications and Hardware Supported on the XW8600 workstation:

AVID qualified Hardware / Shared Storage

	Qualified / Supported by Operating System			Minimum AVID Version S/W M/C = Media Composer SYM = Symphony N/C=NewsCutter		
	Win7 Pro 64-bit	Vista** 64-bit 32-bit	WinXP 32-bit	Win 7 Pro 64-bit	Vista 64-bit	WinXP 32-bit
Mojo DX	Yes	Yes	Yes	M/C v5.0 N/C v9.0	M/C v3.0 N/C v7.0	M/C v3.0 N/C v7.0
Nitris DX	Yes	Yes	Yes	M/C v5.0 SYM v5.0 N/C v9.0	M/C v3.0 SYM v3.0 N/C v7.0	M/C v3.0 SYM v3.0 N/C v7.0
1394 Mojo-SDI DNA	Yes	Yes	Yes	M/C v5.0 N/C v9.0	M/C v3.0 N/C v7.0	M/C v3.0 N/C v7.0
1394 Adrenaline DNA	Yes	Yes	Yes	M/C v5.0 N/C v9.0	M/C v3.0 N/C v7.0	M/C v3.0 N/C v7.0
Matrox MX02 Mini	Yes	Yes	Yes	***Compatible only with Media Composer or NewsCutter Requires minimum M/C 5.0 / NewsCutter 9.0***		
AJA IO Express	Yes	**No**	**No**	***O.S. support - Windows 7 Pro 64-bit only. Compatible only with Media Composer or NewsCutter Requires minimum M/C 5.5.1 / NewsCutter 9.5.1***		
1394 Mojo-Analog DNA	**No**	Yes	Yes			
Symphony-Nitris DNA (Classic)	**No**	**No**	**No**	N/A		
Unity ISIS System Infrastructure	Yes	Yes	Yes	ISIS 1.4 **Infrastructure**		
Unity ISIS 1 Gbit Ethernet Client	Yes	Yes	Yes	ISIS 2.03 **Client**		
Unity ISIS Hi-res (10 Gbit) client	Yes	Yes	Yes	ISIS 2.03 **Client**		
Unity MediaNet Infrastructure	Yes	Yes	Yes	MediaNet 4.2.4 **Infrastructure**		
Unity MediaNet Fibre	Yes	Yes	Yes	MediaNet 5.1.2 **Client**		
Unity MediaNet AECIFs	Yes	Yes	Yes	MediaNet 5.1.2 **Client**		

**** Important note regarding Vista O.S.:**

Vista Business 64-bit Edition supported with all s/w releases on matrix

Vista Business 32-bit Edition supported only *with releases prior to Media Composer 5.0, Symphony 5.0 and NewsCutter 9.0*

AVID qualified HBA info

AVID qualified HBA	AVID Part Number	Slot Location	Function
1394a 4k Buffer Firewire Card PCI	7030-20154-01	#1	1394 connectivity for: 1394 Adrenaline DNA / 1394 Mojo-SDI DNA / 1394 Mojo Analog DNA
(Optional) 1394a PCI-E Firewire Card	Not stocked by AVID	#3	Optional: Secondary 1394 adapter required for 1394 Adrenaline / 1394 Mojo configurations for support of a 2nd 1394 device (camera / deck etc). PCI-Express 1394a controller only. Avid recommends: 1.) Pyro AV Turbo 1394a PCI-E (P/N PVC-316) 2.) ADS Technologies PYRO 1394 PCI-Express (p/n API-316)
Avid HIB, DX Interface HBA**	Active: 7030-30048-01 7030-20084-01 Passive: 7030-30021-01	#4	Avid DX Hardware Interface HBA
Matrox MX02 Mini PCI-E Interface HBA	Not stocked by AVID	#4	Matrox MX02 Mini interface (Part of Matrox MX02 Mini kit)
AJA IO Express PCI-E Interface HBA	Not stocked by AVID	#4	AJA IO Express interface (Part of AJA IO Express kit)
Atto R380	7030-20166-01	#5	Local Storage support – VideoRAID ST (5-bay), and Xtore StudioRAID 5Ti (5-bay) chassis
Atto UL5D	7030-20002-01	#5	Local Storage – VideoRAID RTR & Legacy Avid u320 SCSI storage *(The UL5D BIOS should be disabled)*
Intel PRO 1000 PT***	7030-20139-01	Slot #6 Or Slot #5	Shared Storage: ISIS Copper Gb-Ethernet Slot #6 normal default location. For one specific config move to slot#5. See info below. *For ISIS 3.2 or later (connected to ISIS 5000 only) with client running WinXP 32-bit O.S. - Move Intel PRO 1000 PT to slot #5 (from slot #6, normal location). Using the Intel PRO 1000 PT in slot #5 also requires Intel driver v14.7.*
Intel PRO 1000 PF***	Not stocked by AVID	Slot #6 Or Slot #5	Shared Storage: ISIS Copper Gb-Ethernet Slot #6 normal default location. For one specific config move to slot#5. See info below. *For ISIS 3.2 or later (connected to ISIS 5000 only) with client running WinXP 32-bit O.S. - Move Intel PRO 1000 PF to slot #5 (from slot #6, normal location). Using the Intel PRO 1000 PF in slot #5 also requires Intel driver v14.7.*
Atto FC-41ES	7030-20004-01	#6	Shared Storage: Unity MediaNet Fibre
Chelsio S310E-SR^^	7030-20171-01	#6	Shared Storage: ISIS 7000 only, 10Gb-Ethernet Qualified only with Windows XP 32-bit and Vista 64-bit O.S. *Cannot be used with Win7 O.S.or ISIS 5000*

Specific Important qualified HBA Support Notes

**** *DX Interface HBA Support Note: (See reference pictures on following page of this guide).*

1) Active DX interface HBA (7030-30048-01 and 7030-20084-01) function with all XW8600 DX supported releases of Media Composer and NewsCutter. (Media Composer 3.5.4 and NewsCutter 7.5.4 or later releases).

2) Passive DX interface HBA (7030-30021-01) requires Media Composer 3.5.9 or NewsCutter 7.5.9 or later version software. Running the passive version DX HIB with prior software releases may result in instability.

*** *Intel PRO 1000 PT and PF HBA - ISIS 5000 / 7000 Support Note.*

1) Normally installed in slot #6 for ISIS 7000 / 5000. *See exception below.*

2) ***Exception - For ISIS 3.2 or later (connected to ISIS 5000 only) with client running WinXP 32-bit O.S. Move Intel PRO 1000 PT / PF to slot #5 (from slot #6 which is the slot it normally resides in). Using the Intel PRO 1000 PT / PF in slot #5 also requires Intel driver v14.7.***

^^ *Chelsio S310E-SR 10Gb Interface HBA Support Note.*

1) Qualified only with Windows XP 32-bit and Vista 64-bit O.S. *Cannot be used with Win7 O.S.*

4.) Slot Configuration:

-			**DX Hardware configs Or Matrox MX02 Mini configs Or AJA IO Express configs**	**1394 Adrenaline DNA Hardware Or 1394 Mojo-SDI DNA Hardware Configs**
Slot #	Electrical	Mechanical		
1	PCI 32bit /33MHz	PCI 32/33	**Do Not Use.** Will cause PCI BUS contention with embedded (front-panel / rear-panel) 1394 controller ports.	*1394 PCI HBA required (w 4K buffers)* ***AVID 1394 DNA hardware must connect to the PCI 1394b 4K Buffer HBA***
2	x16 PCI-E	x16	Quadro FX 3700	
3	x4 PCI-E	x8	*Not Used*	Optional: 1394a PCI-E Firewire Card Secondary 1394 adapter for Adrenaline / Mojo configurations for support of a 2nd 1394 device (camera / deck etc). PCI-Express 1394a controller only.
4	x16 or x8 PCI-E (Set to x8 electrical via system BIOS)	x16	Avid HIB, DX Interface HBA Active: 7030-30048-01 & 7030-20084-01 (all s/w releases) Passive: 7030-30021-01 *(Requires M/C – Symphony s/w releases 3.5.9 or later and NewsCutter 7.5.9 or later)* OR Matrox MX02 Mini PCI-E Interface HBA OR AJA IO Express PCI-E Interface HBA	*Not Used*
5	X8 or x1 PCI-E (Set to x8 electrical via system BIOS)	x8	Local Storage Controllers: Atto R380 – Avid VideoRAID ST (5-bay) SAS support Atto R380 – Xtore StudioRAID 5Ti (5-bay) SAS support Atto UL5D - Legacy u320 SCSI support *(The UL5D BIOS should be disabled)* Shared Storage Controllers: *Intel PRO 1000 PT and PF with only the following config: ISIS 3.2 or later s/w with ISIS 5000 Hardware and Win XP 32-bit client.* *Using the Intel PRO 1000 PT or PF in slot #5 also requires Intel driver v14.7.* *For all other shared storage configs Intel PRO 1000 PT / PF reside in slot #6*	
6	x4 PCI-E	x8	Shared Storage Controllers: Atto FC-41ES – MediaNet LAN Share Intel PRO 1000 PT – ISIS 5000 / 7000 Intel PRO 1000 PF – ISIS 5000 / 7000 Chelsio S310E-SR - 10Gb ISIS 7000	
7	PCI-X 133MHz	PCI-X 64-bit	*** Important – This slot shares the same bus as the embedded SAS 1068 controller. This is particularly important for users utilizing the embedded SAS ports to interface to a local storage array such as the Avid VideoRAID SR. Installation of any non-specified HBA into this slot (in particular a PCI 32-bit/33MHz HBA) will result in severely degraded performance of the embedded SAS controller and associated storage. This slot should not be used if the embedded SAS controller / external SAS ports of the XW8600 are utilized.*	

5.) 1394 (Adrenaline / Mojo) DNA configuration requirements (slot #1 requirement)

1394 Adrenaline and 1394 Mojo must connect via an add-in 1394a Firewire card (with 4K buffer) installed in Slot #1 The XW8600 embedded 1394 port cannot be used.

Qualified Firewire card: 1394a 4k Buffer Firewire Card, Avid P/N: 7030-20154-01, PCI 32-bit/33MHz

6.) Utilization of the XW8600 embedded (on-board) 1394 ports.

Configuration	On-board 1394 Utilization	Notes
1394 Adrenaline H/W 1394 Mojo H/W Configs	**No, do not use on-board 1394.** Avid specified add-in 1394a controller required in slot #1 for 1394 Adrenaline / 1394 Mojo connectivity.	**Embedded 1394 Not supported for connectivity to AVID 1394 DNA (Adrenaline / Mojo) hardware.** For Adrenaline / Mojo configs the embedded 1394 controller cannot be used. An add-in 1394 controller with 4K buffer is required in slot #1. The 1394 add-in controller in slot # 1 shares same bus as embedded 1394 ports which results in the inability to use the on-board 1394 for any purpose with 1394 Adrenaline and 1394 Mojo configurations due to potential system bus contention issues..
DX Hardware Or Matrox MX02 Mini Hardware configs Or AJA IO Express Hardware configs	**Yes** - Supports 1394 Deck / Camera / Disk Drive (1394 disk drives are recommended only for file transfers)	**Please Note:** The XW8600's embedded 1394 controller / ports share the same bus as slot#1 (PCI 32bit /33MHz). As a result slot#1 must be left empty for DX, Matrox MX02 or software only configurations when using the embedded 1394 ports for camera / deck interface to avoid system bus contention issues.
S/W Only	**Yes** - Supports 1394 Deck / Camera / Disk Drive (1394 disk drives are recommended only for file transfers)	

7.) Secondary 1394 port for 1394 Adrenaline and 1394 Mojo configs

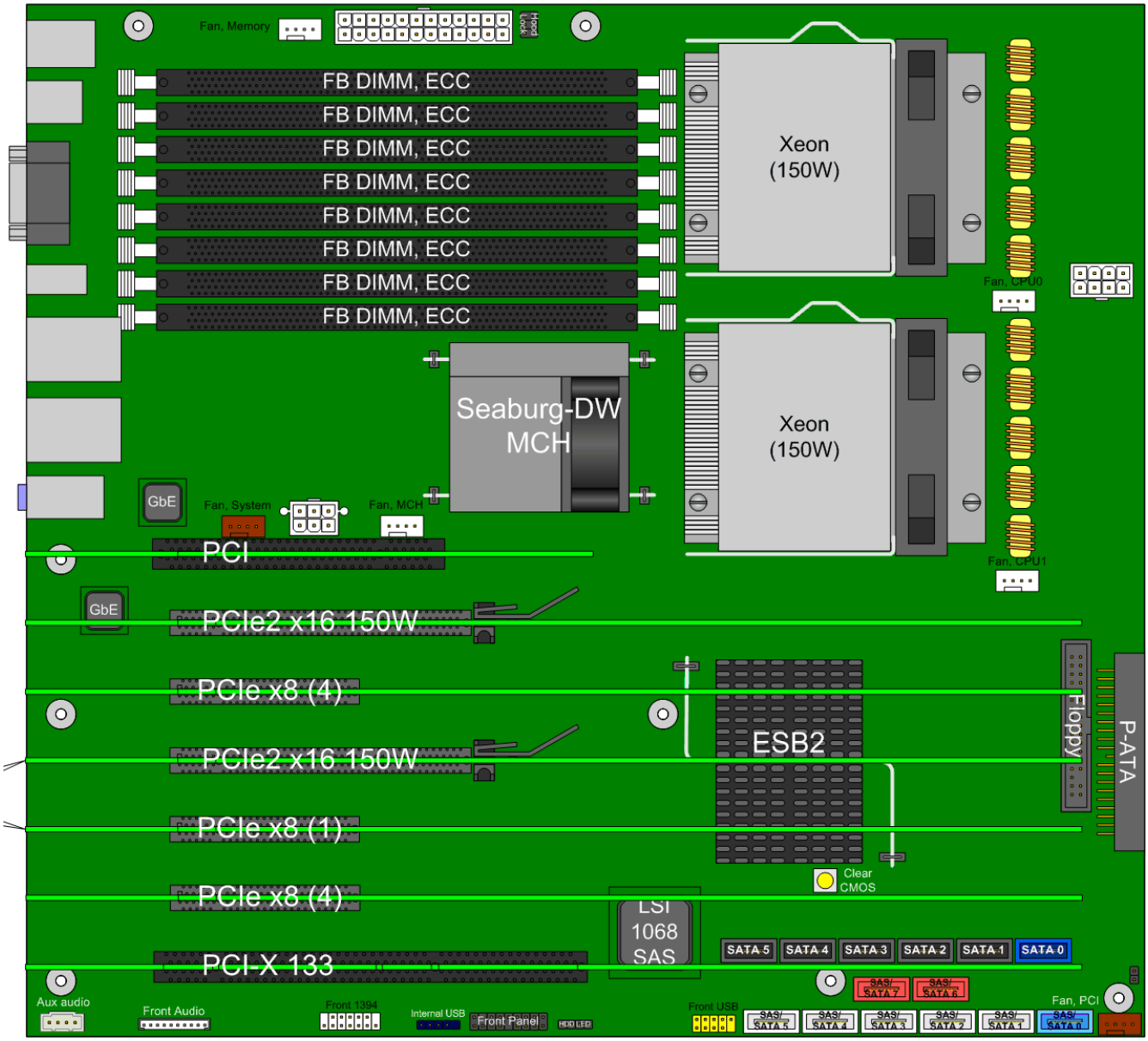
For all 1394 Adrenaline and 1394 Mojo configurations, a secondary 1394 port (for support of a 2nd 1394 device such as a Camera / Deck / Disk drive) must be established via an add in PCI-E 1394 controller installed in slot #3. For further details see information above for slot #3 configuration

8.) 1394 Adrenaline / 1394 Mojo-SDI / Win7 Flamethrower issue

Windows 7 users running 1394 Adrenaline / 1394 Mojo-SDI DNA hardware, may experience random Flamethrower errors when working with Media Composer 5.0 and NewsCutter 9.0. To resolve this, use the Legacy OHCI 1394 driver. For more details, see KB article 373959 (link below):

http://avid.custkb.com/avid/app/selfservice/search.jsp?DocId=373959&ssdFilterCommunity15=1408&ssdFilterCommunity13=0&ssdFilterCommunity11=0&ssdFilterCommunity10=368&ssdFilter_SearchKeyWord=Win7+legacy+driver&page=1&ssdSearchOperator=0&ssdFilterCommunity3=0&Hilite=Win7+legacy+driver

HP XW8600 Slot Layout



Joe Conforti – Avid Technology – May 9th, 2011

Rev H

9.) Various Configuration Issues:

A.) D/X hardware configs –

Active DX interface HBA's (P/N's 7030-30048-01 and 7030-20084-01) pictured below function with all Z400 DX supported releases of Symphony, Media Composer and NewsCutter. (Media Composer / Symphony 3.5.4 and NewsCutter 7.5.4 or later releases).

7030-30048-01

7030-20084-01

Passive DX interface HBA (7030-30021-01) pictured below requires minimum Symphony / Media Composer 3.5 9 or NewsCutter 7.5.9 version software. Running the passive version DX HIB with prior software releases may result in instability.

B.) Qualified Avid system BIOS version(s): (As of this writing):

If the XW8600 has BIOS version 1.17 or earlier installed, it is **mandatory** that the BIOS be updated to an "AVID qualified" BIOS. *Failure to update the XW8600 to an "Avid qualified BIOS" may result in non-optimal operation of the AVID software and hardware.*

- 1.18 (Minimum BIOS version for Avid environments with XP and Vista).
- Also qualified ver 1.24, ver 1.27, ver 1.32, ver 1.35***, v*er 1.36****

**** Ver 1.35 minimum version BIOS recommendation for Win7 O.S. Environments***

*****Ver 1.36 HP highly recommends ver 1.36 for systems running a 64-bit O.S.***

Current Avid qualified XW8600 BIOS information and installers is maintained at the following Avid KB link:

http://avid.custkb.com/avid/app/selfservice/search.jsp?DocId=267609&Hilite=hp+bios

Required system BIOS change to set PCI-E speeds for slots #4 and #5

During boot up press **F10** at the white HP screen, for **Set Up**.

Select **English**. **<Enter>**

Select the **Advanced** tab

Select **Chipset / Memory <Enter>**

Select **PCIe Lane Allocation (SLOT4: SLOT5)**

Default setting is **AUTO**

Change this setting from **AUTO** to **x8:x8**

Press **F10** to **Save**

Save Changes and Exit

C.) WinXP 32-bit Configuration Issue:

Windows XP 32-bit memory utility: (AVID Install3GB utility) (Does not apply to systems running Vista 64-bit). Upon completion of the AVID software installation, the AVID / WinXP 32-bit memory utility must be run to properly configure the WinXP 32-bit environment to run AVID software. This utility is named "Install3GB" and resides in the following folder location c:\ Programs \ Avid \ Utilities \ 3GB. Simply double-click on the "Install3GB" utility and enter the proper parameter for your particular AVID configuration. The "Install3GB" utility is user friendly and will walk the user through determination of the proper setting. This utility only needs to be run once and will create the proper permanent WinXP 32-bit operating system setting. Should your AVID hardware / software configuration ever change, simply rerun the utility and reconfigure WinXP 32-bit as needed. *The "Install3GB" utility should never be run for a Vista 64-bit environment (WinXP 32-bit only).*

D.) Nvidia Qualified Drivers:

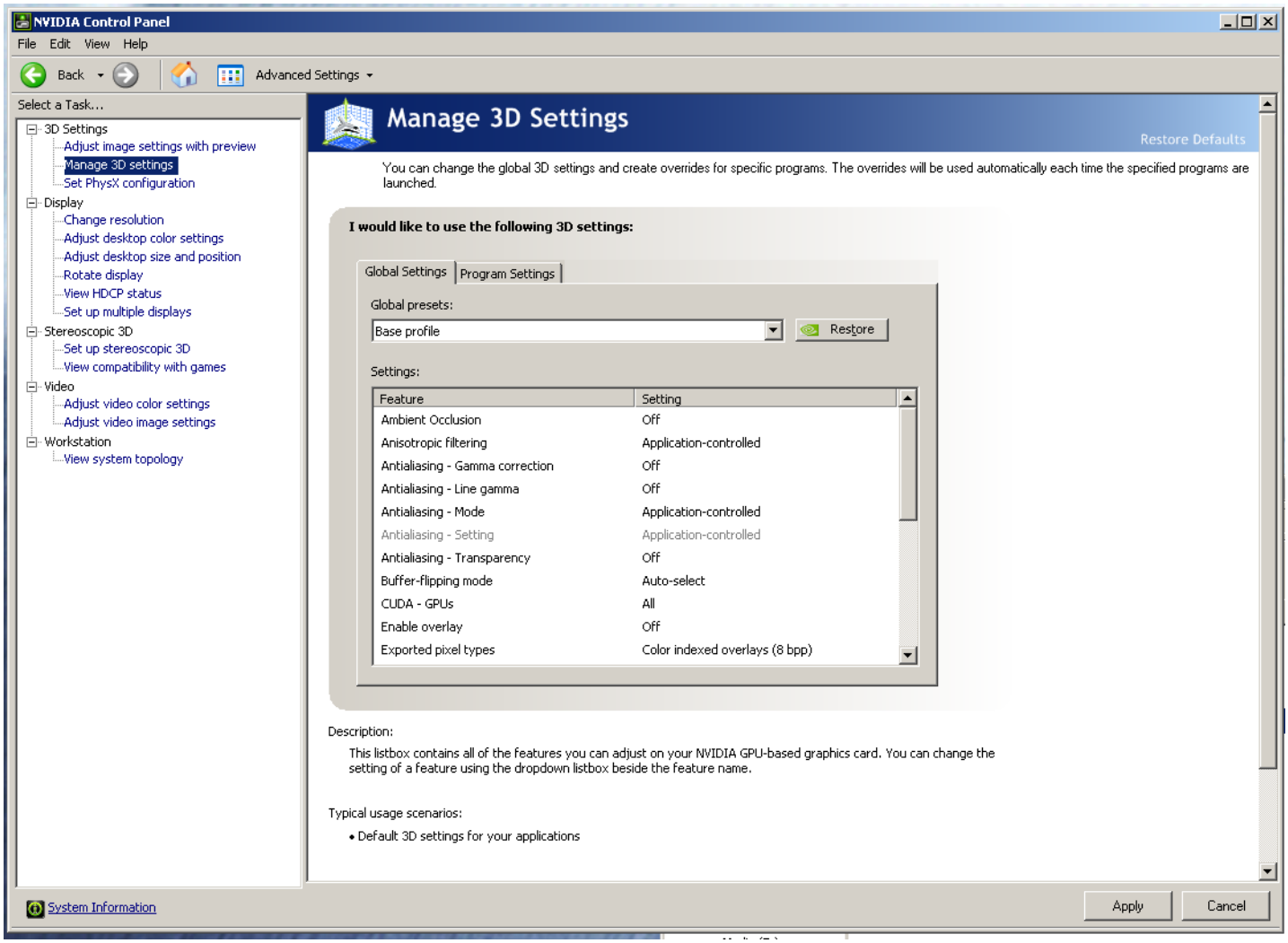
Nvidia qualified drivers

AVID Software	Version(s)	Minimum Rev Nvidia Driver Required
Media Composer / Symphony	4.0.3 and later	190.38
NewsCutter	8.0.3 and later	190.38
Media Composer / Symphony	3.5.4 to 4.0.2	182.65
NewsCutter	7.5.4 to 8.0.2	182.65
Media Composer / Symphony	3.0 to 3.51	169.47
NewsCutter	7.0 to 7.51	169.47

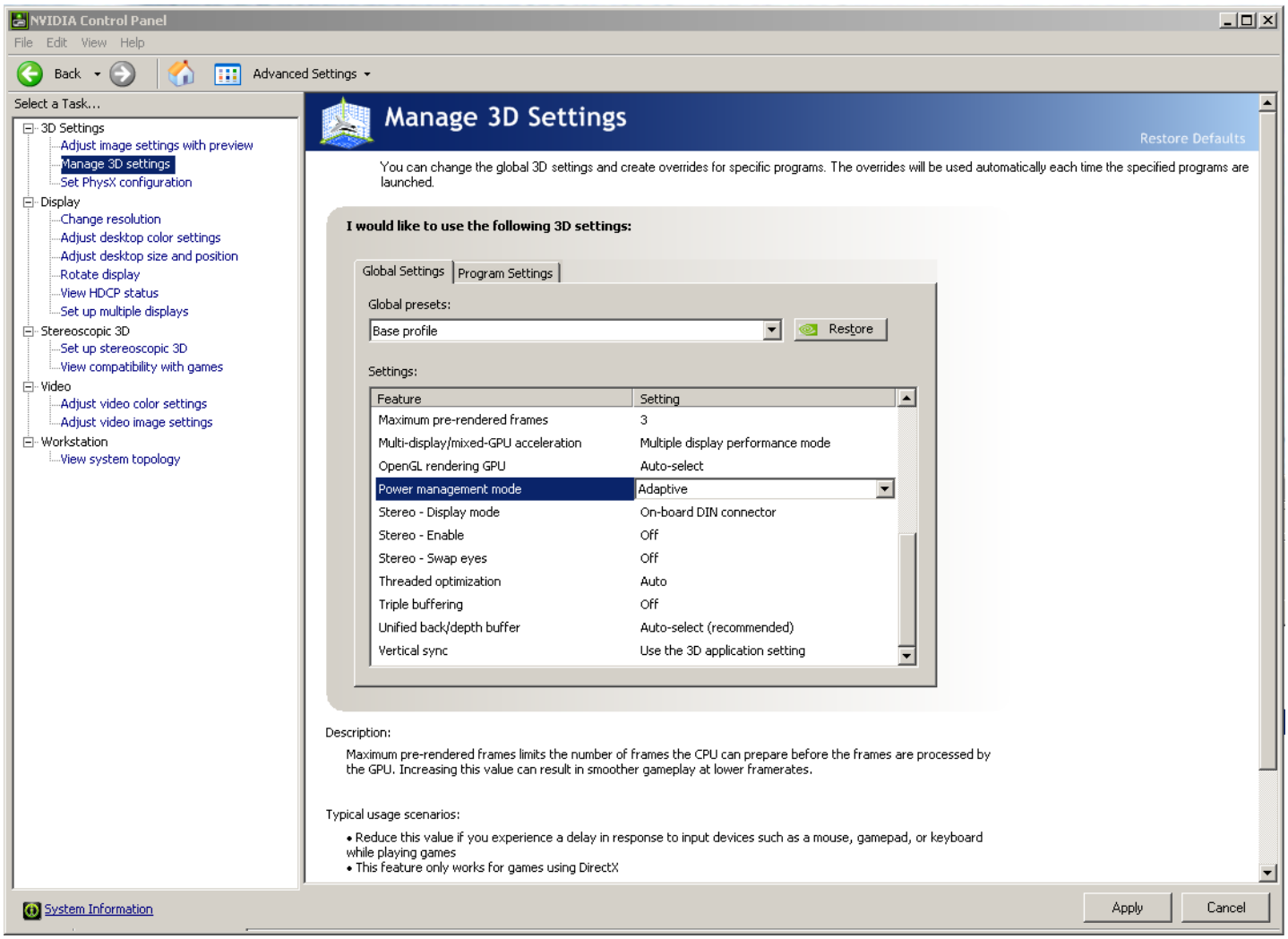
After installation of the AVID software the supported Nvidia driver can be found in the following directory:
Program Files / Avid / Utilities / Nvidia

Set optimized Nvidia driver settings for Avid editing environments:
For driver version 190.38 make the following setting for "Power Management Mode"

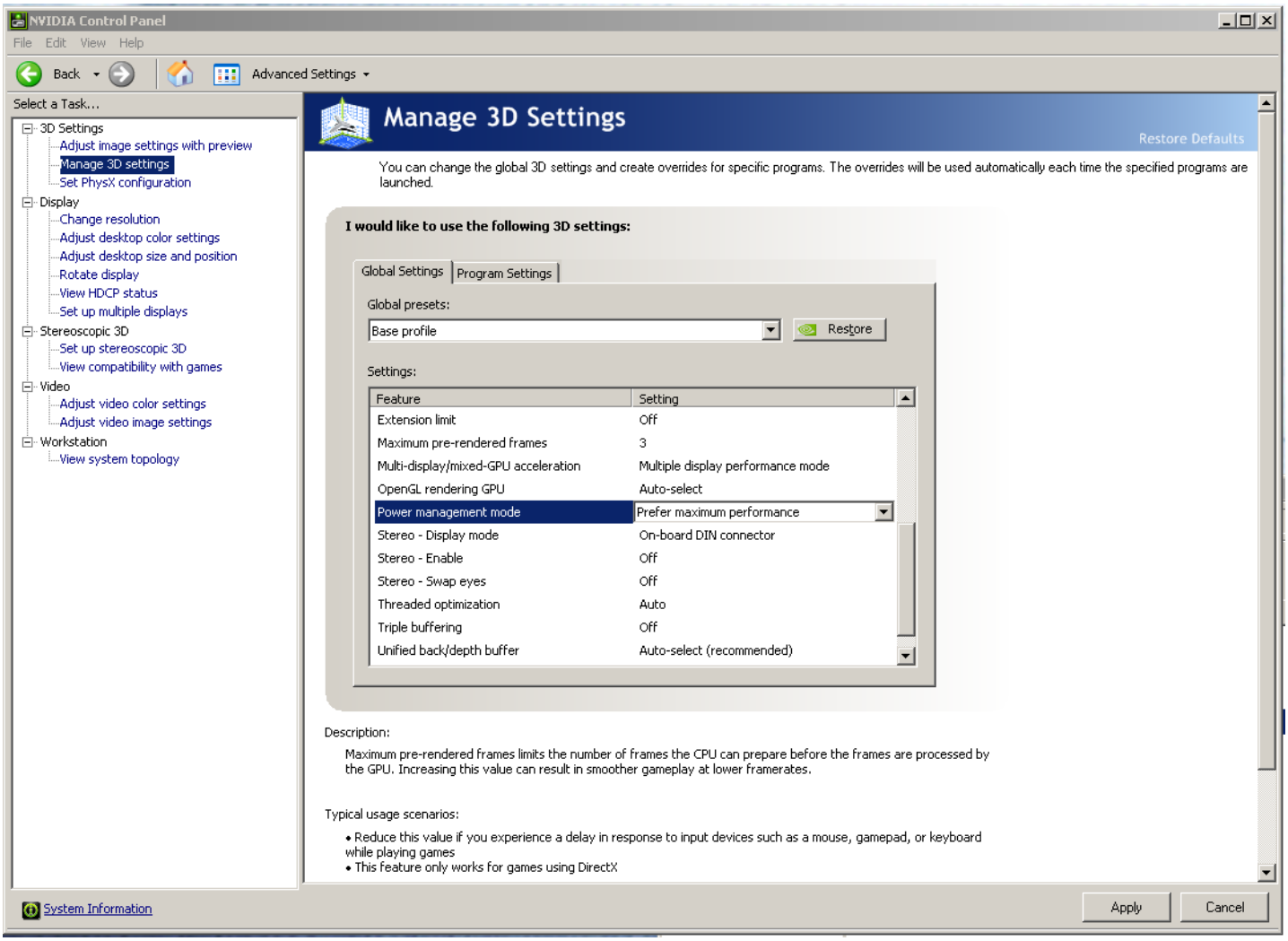
1. Right-Click on the desktop
2. Select Nvidia Control Panel
3. Select Manage 3D Settings
4. Select "Global Settings" Tab
5. Under the "Global Settings" tab select "Base Profile" as shown in the picture below:



6. Scroll down and locate the “Power Management Mode” feature. The default setting is “Adaptive” as shown in the picture below.



7. For the “Power management mode” feature, select “Prefer maximum performance” as shown in the picture below.



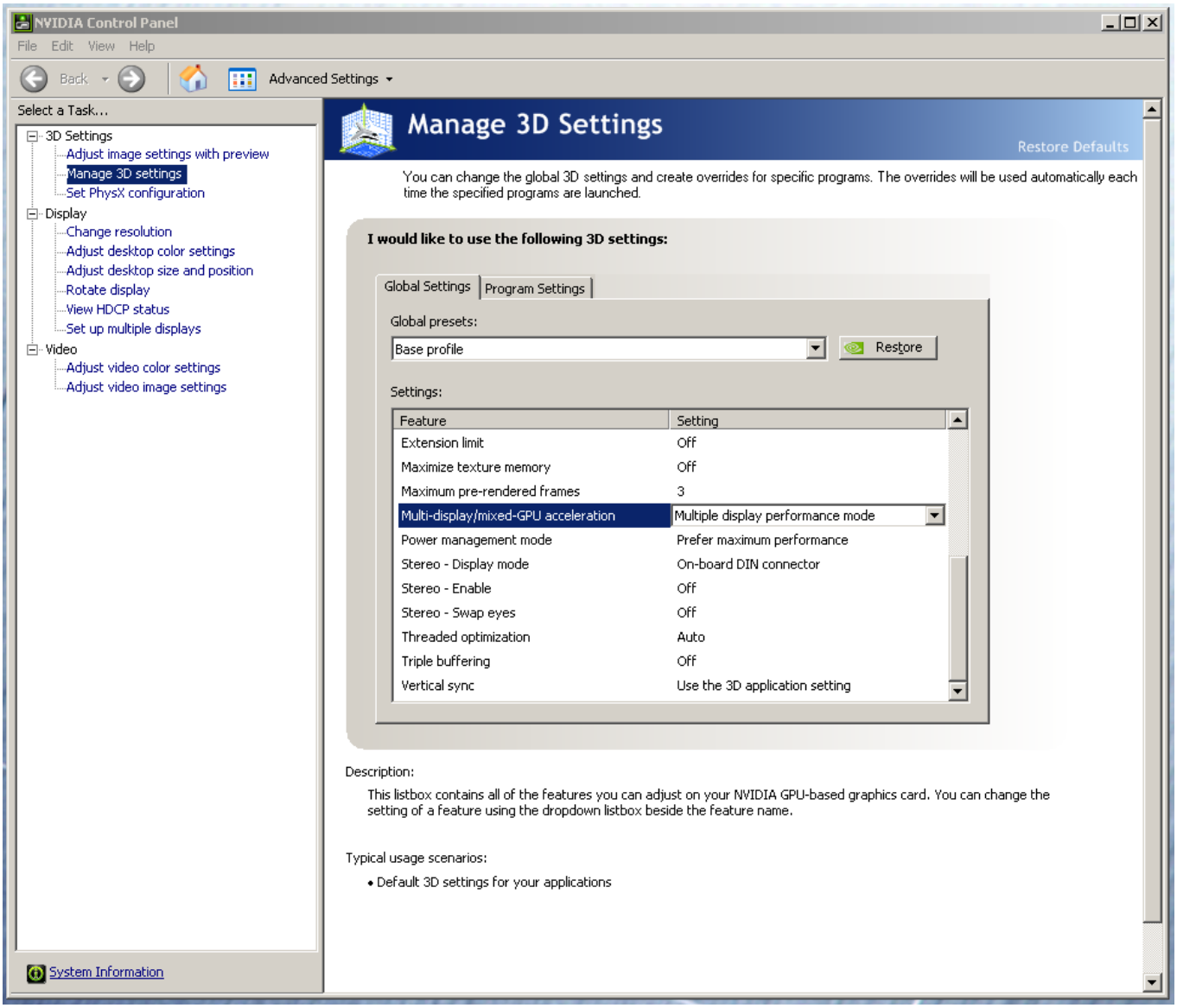
8. Depress the “Apply” button.

For driver version 190.38 make the following setting for "Multi-display/mixed-GPU acceleration"

1. Stay in the "Manage 3D Settings" and "Base Profile" area

2. Select "Global Settings" Tab

3. Scroll down and locate the "Multi-display/mixed-GPU acceleration" feature. See picture below. The setting should be set to "Multiple display performance mode". If not set properly, select Multiple display performance mode and depress the "Apply" button. (The other settings are "Single display performance mode" and "Compatibility performance mode". These settings are not recommended for Avid editing environments).



E.) Serial Port Deck Control:

Serial Port Deck Control:

The HP XW8600 workstation does have an embedded serial port. The embedded serial-port has been qualified by Avid and will maintain frame accuracy in Avid environments. Primary or secondary / additional serial port deck control can be established via two methods (both of which have been qualified by Avid and will maintain frame accuracy in Avid environments)

1. Addenda model **RS-USB / 4** direct USB-to-RS422 serial adapter. This is a simple device which connects directly from a USB port of the Z800 directly to the RS422 port of a deck.
   http://www.addenda.com/addenda-elect/products/rsUSB4.php

2. Combination of a Keyspan (Tripp-Lite) Model USA-19HS USB-to-serial-port adapter with Addenda Rosetta Stone model RS – 2/8 RS232-to-RS422 converter

   - Keyspan (Tripp-Lite) Model USA-19HS (AVID P/N 7080-20013-01)
     http://www.tripplite.com/en/products/model.cfm?txtSeriesID=518&EID=13384&txtModelID=3914
   - Addenda Rosetta Stone (or equivalent) model RS – 2/8 RS232-to-RS422 converter (AVID P/N 7070-00507-01)
     http://www.addenda.com/addenda-elect/products/rs28.php

To connect the Keyspan 19HS / Addenda RS -2/8 combination:

- Install the Keyspan 19HS driver before plugging the device into a Z800 USB port.
- Once the Keyspan 19HS driver is installed then plug the Keyspan 19HS into a Z800 USB port.
- The Keyspan 19HS will now show up in device driver.
- Using a serial cable, connect the 9-pin serial port of the Keyspan 19HS USB adapter to the port of the Addenda marked RS232 from PC
- Using a 2nd serial port cable connect the port of the Addenda marked “RS422 to VTR” to the deck control serial port of the deck.

F.) O.S. setting recommendations for optimum performance with Avid Editing applications:

The following links provide O.S. setting suggestions for ensuring optimum performance when working with your Avid editing application with a Windows operating system.

- Optimizations for Video Editors - Windows Vista or Win 7

  http://avid.custkb.com/avid/app/selfservice/search.jsp?DocId=390339

- Optimizations for Video Editors – Windows XP

  http://avid.custkb.com/avid/app/selfservice/search.jsp?DocId=390331

G.) Supported external local SAS storage connectivity via embedded SAS controller and ports:

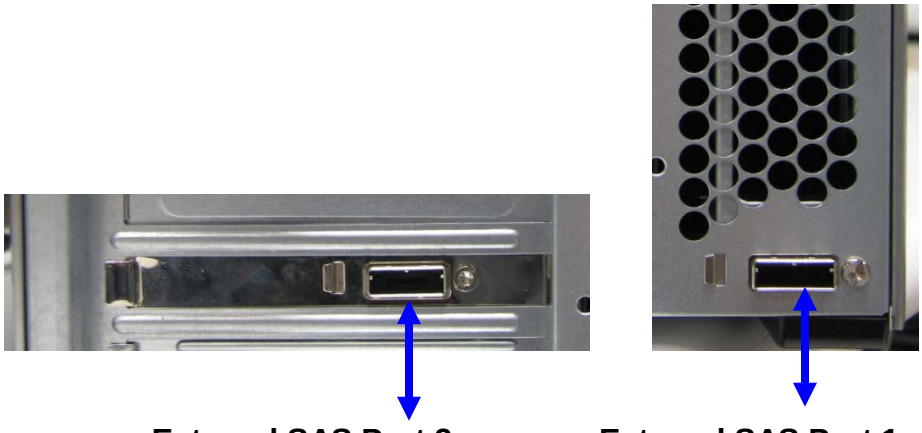
Supported

- **AVID VideoRAID SR (16-bay)**
- **Xtore StudioRAID 16Re (16-bay) / 5Te (5-bay) chassis**

The XW8600 can support:

a. Up to two external AVID VideoRAID SR (16-bay) SAS local storage chassis
b. Mix and match of up to two external Xtore StudioRAID 16Re (16-bay) / 5Te (5-bay) chassis

Simultaneous connectivity of AVID VideoRAID and Xtore chassis is not formally qualified or recommended.

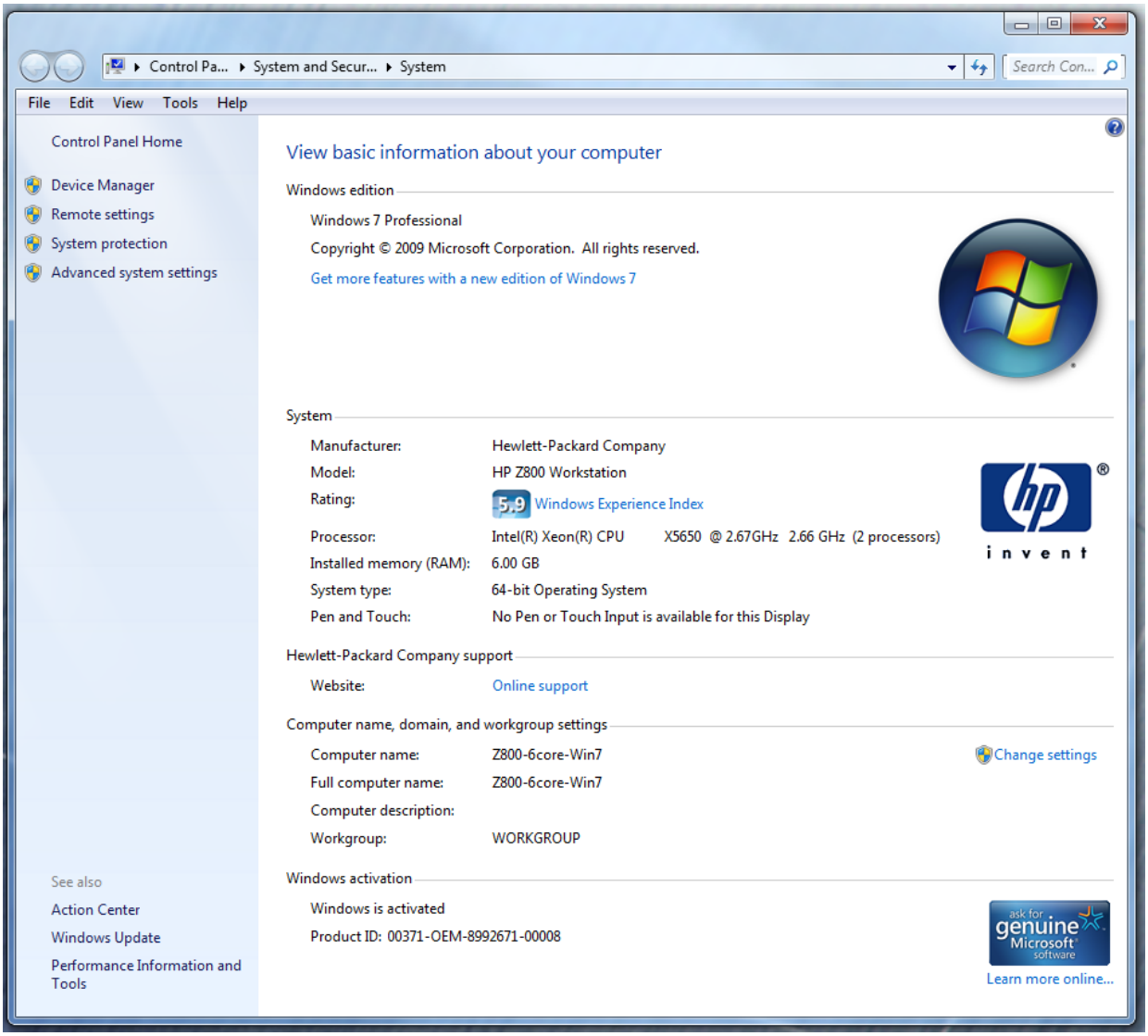


External SAS Port 2 **External SAS Port 1**

H.) Set Windows “Visual Effects” for “best performance”:

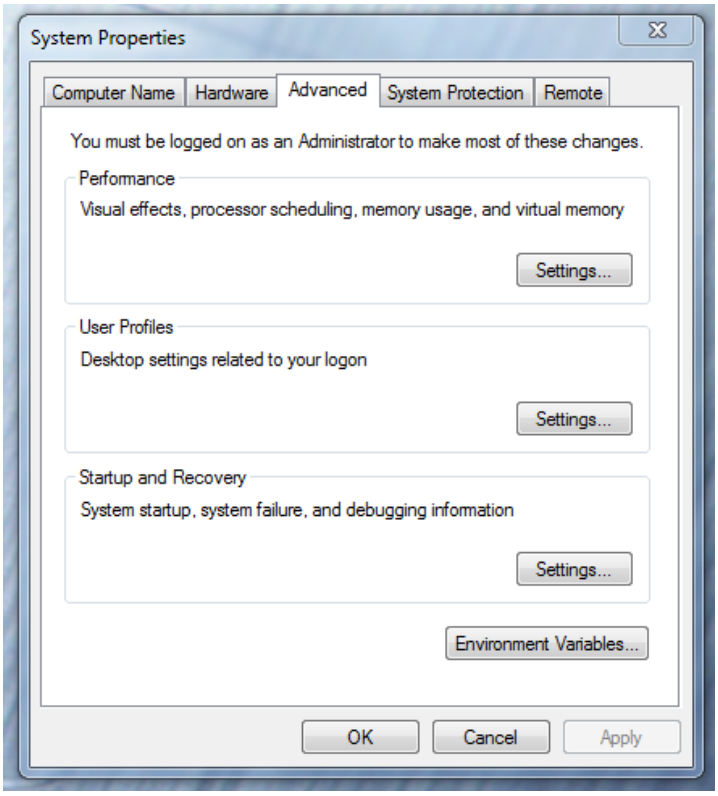
(Please Note: Windows 7 screen shots shown for reference. WinXP and Vista screens will vary).

1. Right-Click on My Computer / Computer
2. Select Properties
3. The screen below will be displayed:

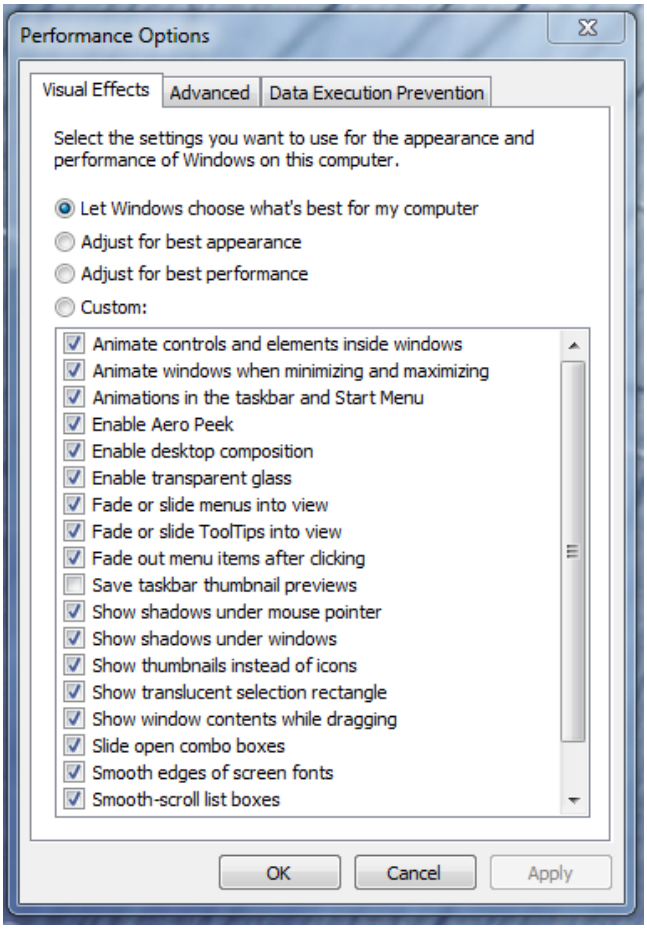

Control Pa... ▸ System and Secur... ▸ System
Search Con...
File Edit View Tools Help
Control Panel Home
Device Manager
Remote settings
System protection
Advanced system settings
View basic information about your computer
Windows edition
Windows 7 Professional
Copyright © 2009 Microsoft Corporation. All rights reserved.
Get more features with a new edition of Windows 7
System
Manufacturer: Hewlett-Packard Company
Model: HP Z800 Workstation
Rating: 5.9 Windows Experience Index
Processor: Intel(R) Xeon(R) CPU X5650 @ 2.67GHz 2.66 GHz (2 processors)
Installed memory (RAM): 6.00 GB
System type: 64-bit Operating System
Pen and Touch: No Pen or Touch Input is available for this Display
invent
Hewlett-Packard Company support
Website: Online support
Computer name, domain, and workgroup settings
Computer name: Z800-6core-Win7
Full computer name: Z800-6core-Win7
Computer description:
Workgroup: WORKGROUP
Change settings
Windows activation
Windows is activated
Product ID: 00371-OEM-8992671-00008
ask for genuine Microsoft software
Learn more online...
See also
Action Center
Windows Update
Performance Information and Tools

4. On the left side of the screen above, locate and select “Advanced system settings”

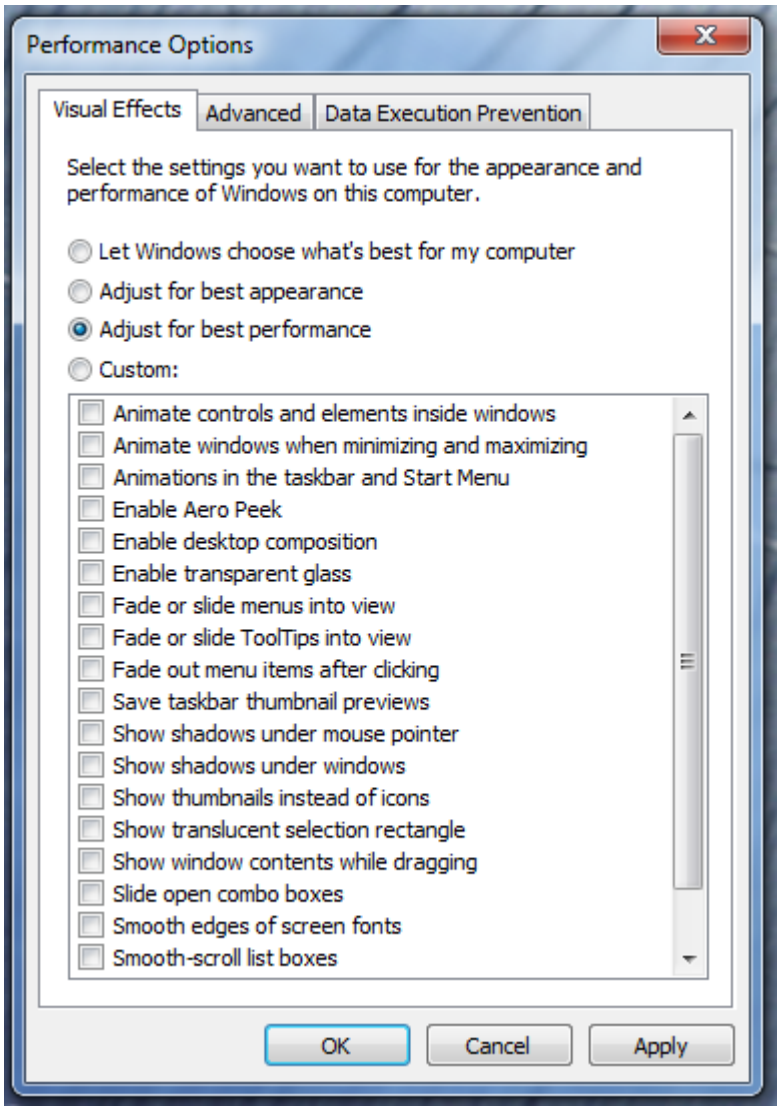
5. The System properties window will be displayed. (Picture below).



6. Under the “Advanced” tab depress the “Settings...” button for performance.
7. The “performance Options” window will be displayed. (Picture below).


Performance Options
Visual Effects
Advanced
Data Execution Prevention
Select the settings you want to use for the appearance and performance of Windows on this computer.
Let Windows choose what's best for my computer
Adjust for best appearance
Adjust for best performance
Custom:
Animate controls and elements inside windows
Animate windows when minimizing and maximizing
Animations in the taskbar and Start Menu
Enable Aero Peek
Enable desktop composition
Enable transparent glass
Fade or slide menus into view
Fade or slide ToolTips into view
Fade out menu items after clicking
Save taskbar thumbnail previews
Show shadows under mouse pointer
Show shadows under windows
Show thumbnails instead of icons
Show translucent selection rectangle
Show window contents while dragging
Slide open combo boxes
Smooth edges of screen fonts
Smooth-scroll list boxes
OK
Cancel
Apply

8. Under the “Visual Effects” tab select the “Adjust for best performance” selection. (Picture below).


Performance Options
Visual Effects
Advanced
Data Execution Prevention
Select the settings you want to use for the appearance and performance of Windows on this computer.
Let Windows choose what's best for my computer
Adjust for best appearance
Adjust for best performance
Custom:
Animate controls and elements inside windows
Animate windows when minimizing and maximizing
Animations in the taskbar and Start Menu
Enable Aero Peek
Enable desktop composition
Enable transparent glass
Fade or slide menus into view
Fade or slide ToolTips into view
Fade out menu items after clicking
Save taskbar thumbnail previews
Show shadows under mouse pointer
Show shadows under windows
Show thumbnails instead of icons
Show translucent selection rectangle
Show window contents while dragging
Slide open combo boxes
Smooth edges of screen fonts
Smooth-scroll list boxes
OK
Cancel
Apply

9. Depress the “Apply” button
10. Reboot Windows
11. Required Windows visual performance settings for Avid environments are now complete.

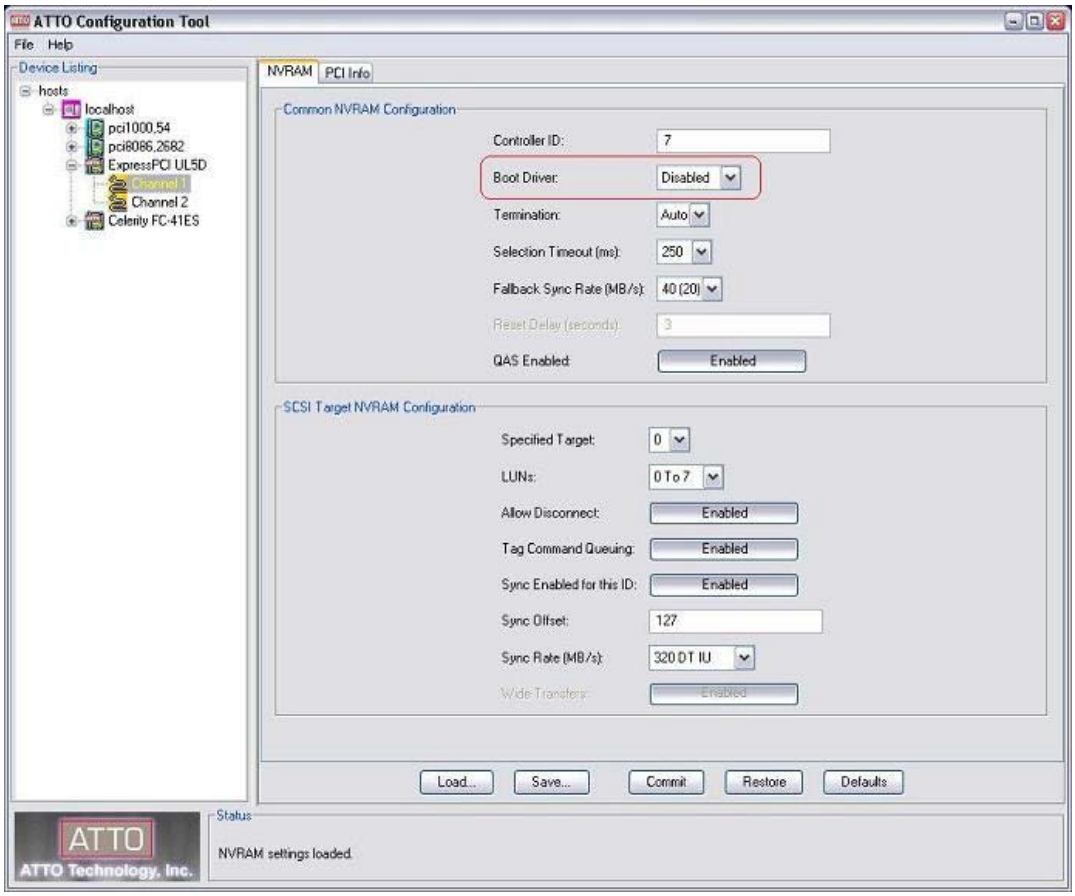
I.) **ATTO UL5D issue:** When an ATTO UL5D PCI-E u320 SCSI controller is installed in slot #5, the UL5D BIOS must be disabled or the following warning may be reported during system boot: (Also the UL5D BIOS must be disabled for proper operation when connected to an AVID VideoRAID RTR u320 SCSI).

110 – Out of memory space for option ROMS.
The option ROM for the following device was unable to run due to memory constraints. If you choose to continue, one or more PCI devices may not work properly

To disable the UL5D BIOS and eliminate the above warning, perform one of the following:

A. AVID Knowledge Base article 273945,
http://avid.custkb.com/avid/app/selfservice/search.jsp?DocId=273945&Hilite=UL5D

Install Atto UL5D configuration tool and launch the software.
Expand the Express PCI UL5D menu, and click on Channel.
The Boot Driver has to be disabled on both channels of the UL5D.
Configure the UL5D per this screenshot, and do this for both Channel 1 and Channel 2



B. Or during system boot perform the following:

1. Reboot the system
2. Hit "Escape" to clear the HP splash screen
3. Hit Ctrl-Z when the following Atto UL5D BIOS message prompts
   ```
   ************************************************
   ** ATTO ExpressPCI ™ Version 2.10 **
   ***** Press [Ctrl + Z] for Setup Utility *****
   ```
4. Select 1 - Adapter menu
5. Select 2 - Configure Both Adapter Channels
6. For ver 2.10 firmware
   - Select Host Adapter BIOS
   - Select "Disabled" using [Page Up] / [Page Down]
7. For ver 2.27 firmware
   - Select Boot Driver
   - Select "Disabled" using [Page Up] / [Page Down]
8. Press "ESC"
9. Press "ESC"
10. Select 4 – Save Parameters and Exit

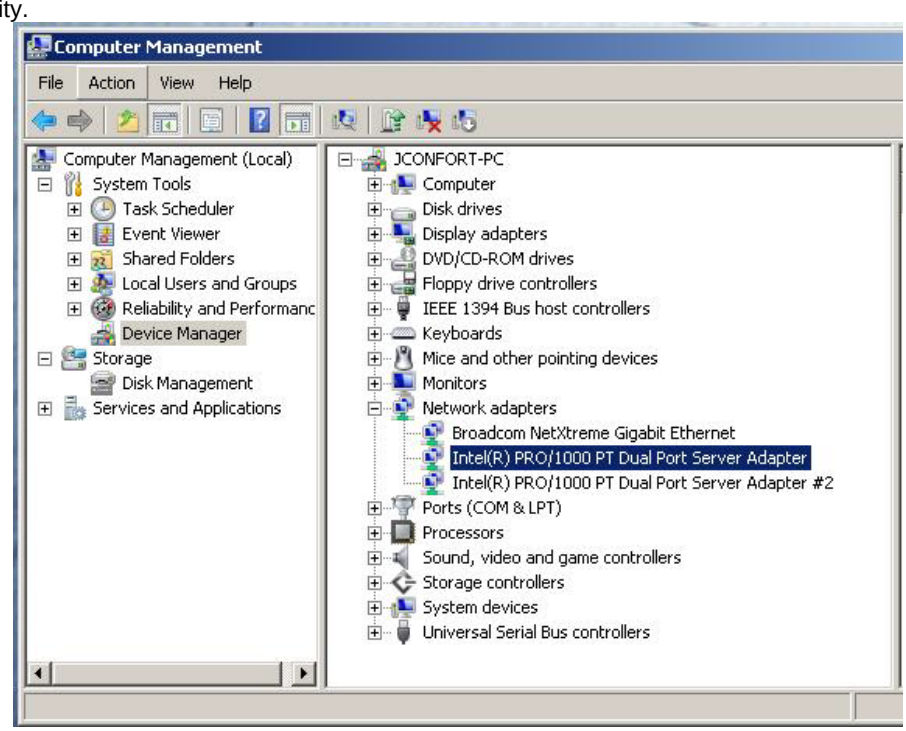
J.) <u>Intel PRO 1000 PT for ISIS connectivity:</u> For proper operation and connectivity of the Intel PRO 1000 PT with ISIS the following are required:

1. For the Intel PRO 1000 PT driver, under the performance settings, change the following parameters:
   - Receive Buffers to 1024
   - Transmit Buffers to 1024

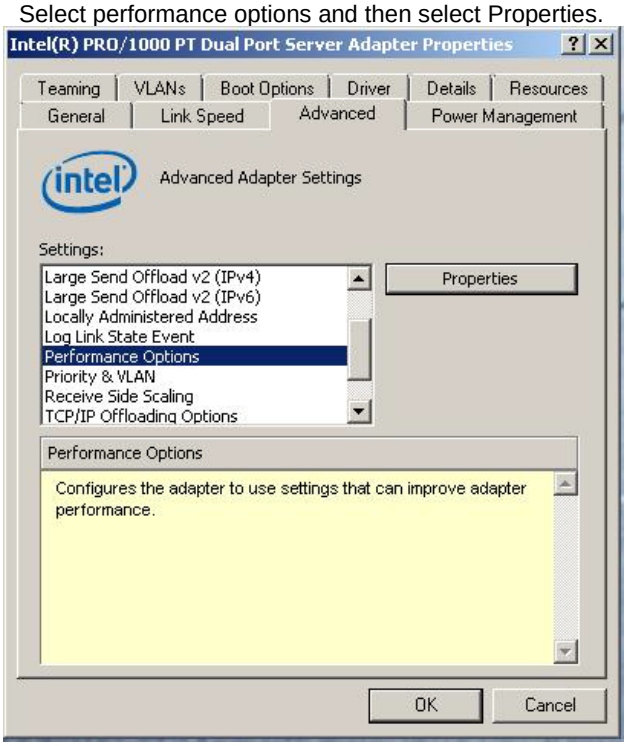
2. Disable the windows firewall.

Intel PRO 1000 PT Driver: The proper driver can be found in the ISIS software directory: Tools_3rdParty / Drivers_and_Firmware

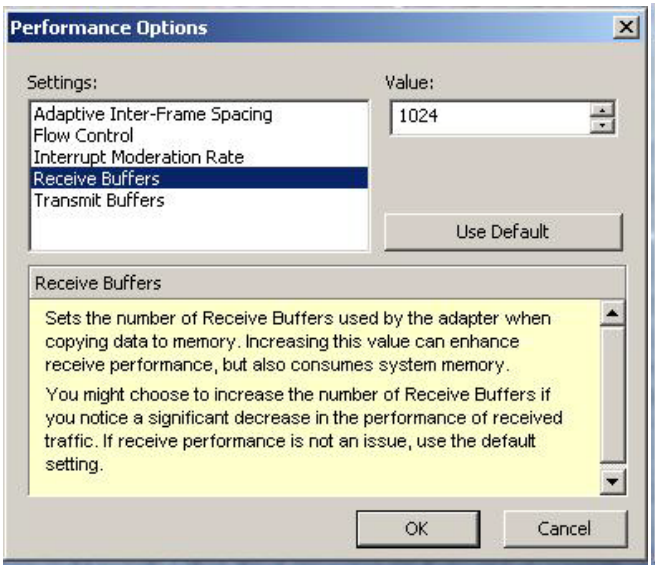
<u>To set the Intel PRO 1000 PT Receive / Transmit buffers:</u>
Go to device manager and select each instance of the device named Intel(R) PRO/1000 PT Dual Port Server Adapter which will be used for ISIS connectivity.



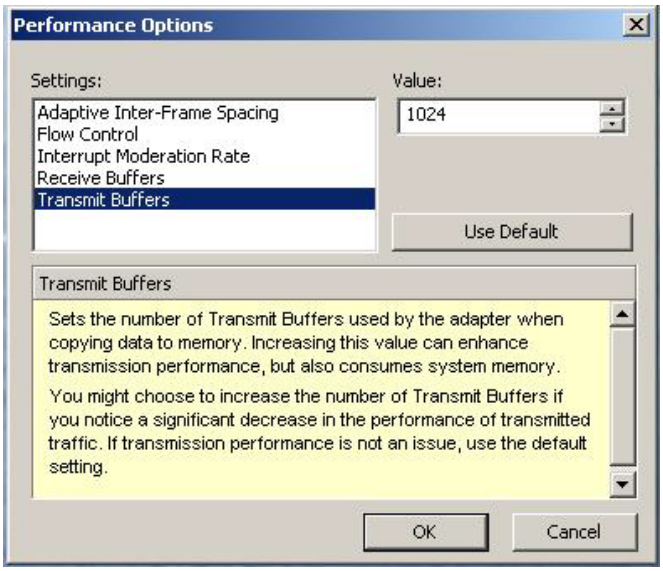
Select performance options and then select Properties.



Set Receive Buffers to 1024

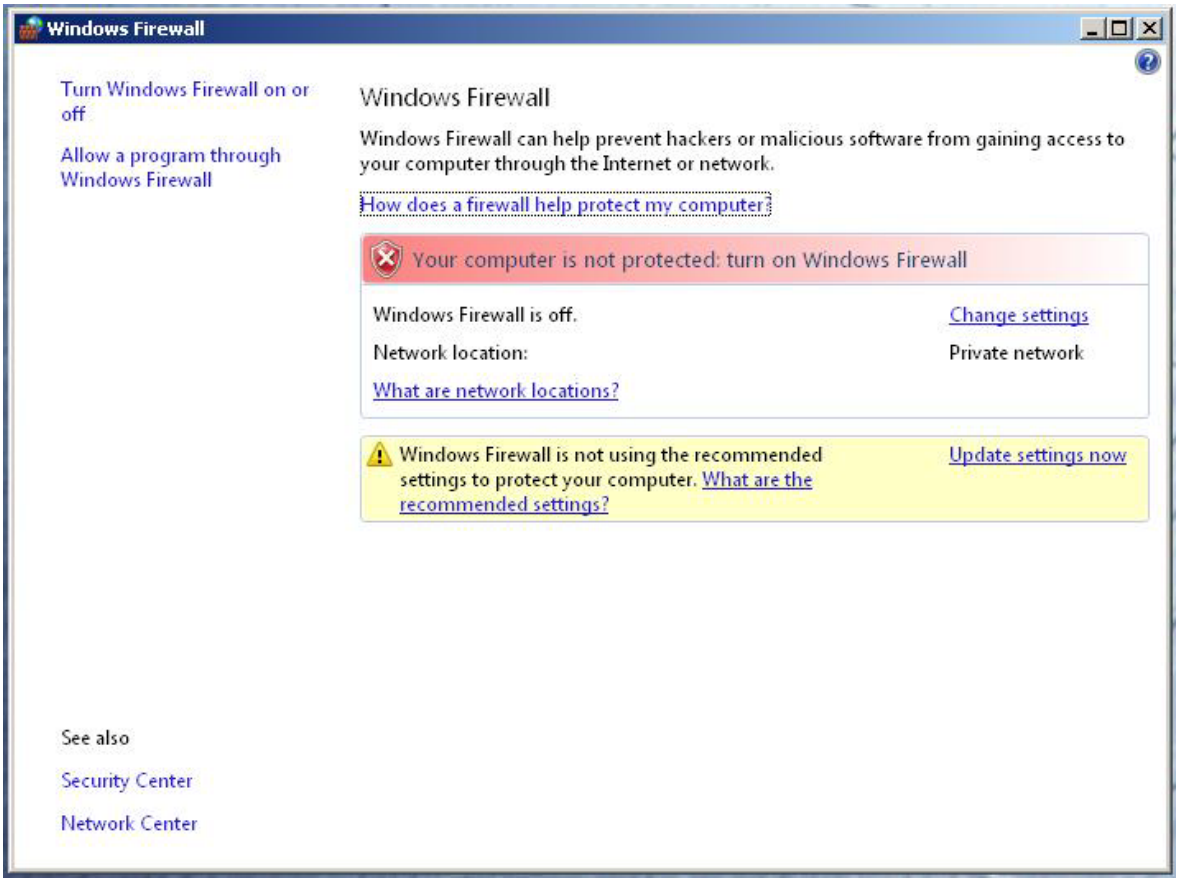

Performance Options
Settings:
Value:
Adaptive Inter-Frame Spacing
Flow Control
Interrupt Moderation Rate
Receive Buffers
Transmit Buffers
1024
Use Default
Receive Buffers
Sets the number of Receive Buffers used by the adapter when copying data to memory. Increasing this value can enhance receive performance, but also consumes system memory.
You might choose to increase the number of Receive Buffers if you notice a significant decrease in the performance of received traffic. If receive performance is not an issue, use the default setting.
OK
Cancel

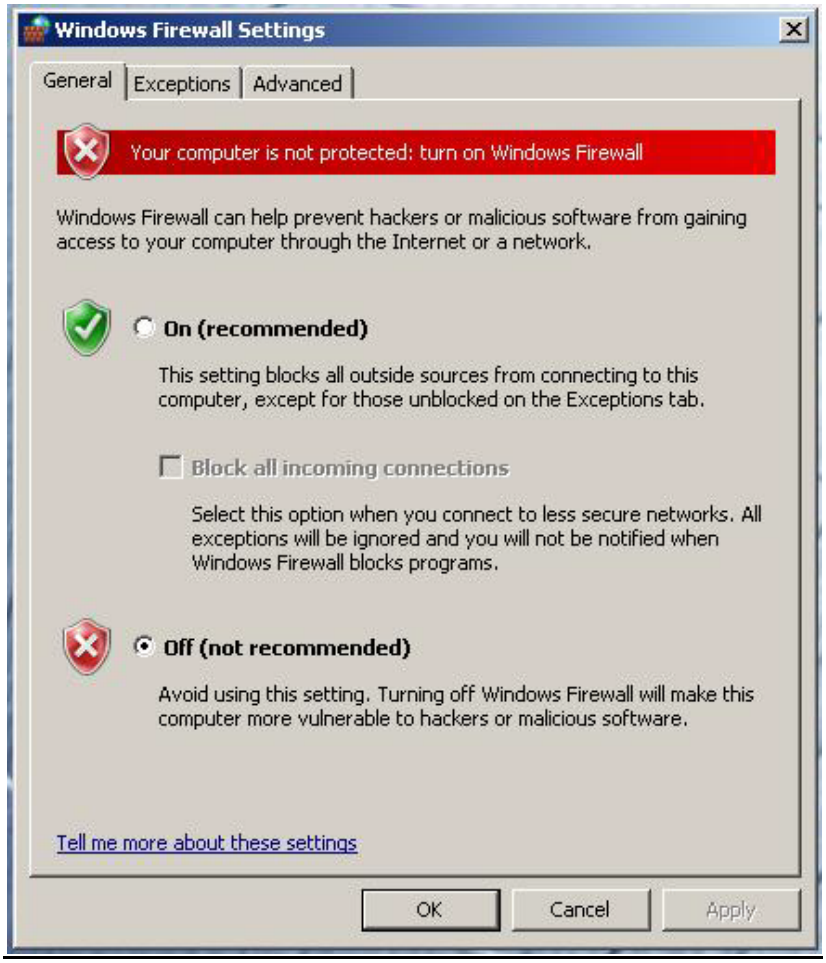
Set Transmit Buffers to 1024


Performance Options
Settings:
Value:
Adaptive Inter-Frame Spacing
Flow Control
Interrupt Moderation Rate
Receive Buffers
Transmit Buffers
1024
Use Default
Transmit Buffers
Sets the number of Transmit Buffers used by the adapter when copying data to memory. Increasing this value can enhance transmission performance, but also consumes system memory.
You might choose to increase the number of Transmit Buffers if you notice a significant decrease in the performance of transmitted traffic. If transmission performance is not an issue, use the default setting.
OK
Cancel

Perform this for each instance of the device named “Intel(R) PRO/1000 PT Dual Port Server Adapter” which will be used for ISIS connectivity.

Disable the windows firewall:


Windows Firewall
Turn Windows Firewall on or off
Allow a program through Windows Firewall
Windows Firewall
Windows Firewall can help prevent hackers or malicious software from gaining access to your computer through the Internet or network.
How does a firewall help protect my computer?
Your computer is not protected: turn on Windows Firewall
Windows Firewall is off.
Change settings
Network location:
Private network
What are network locations?
Windows Firewall is not using the recommended settings to protect your computer. What are the recommended settings?
Update settings now
See also
Security Center
Network Center


Windows Firewall Settings
General
Exceptions
Advanced
Your computer is not protected: turn on Windows Firewall
Windows Firewall can help prevent hackers or malicious software from gaining access to your computer through the Internet or a network.
On (recommended)
This setting blocks all outside sources from connecting to this computer, except for those unblocked on the Exceptions tab.
Block all incoming connections
Select this option when you connect to less secure networks. All exceptions will be ignored and you will not be notified when Windows Firewall blocks programs.
Off (not recommended)
Avoid using this setting. Turning off Windows Firewall will make this computer more vulnerable to hackers or malicious software.
Tell me more about these settings
OK
Cancel
Apply

Revision Update

Revision	Date	Name	Update
A1	Jan 30th 2008	Joe Conforti	Initial Release
B	March 21st 2008	Mike Fortin	Added 4K buffer 1394 card for Adrenaline and Mojo configurations
C	June 17 2008	Joe Conforti	Added further clarification for the Intel PT Pro 1000 HBA requirement / utilization.
D	Dec 15, 2008	Joe Conforti	General Update / Clarifications / ISIS 2.0 support
E	March 20th 2010	Joe Conforti	Details for Media Composer 5.0 / Symphony 5.0, NewsCutter 9.0 releases including info for Win7 support, Matrox MX02 Mini etc. Also General Update / Clarifications
E1	March 21st 2010	Joe Conforti	Corrected Win7 NewsCutter ver to 9.0
F	March 2nd 2011	Joe Conforti	Added support for: Media Composer 5.5, Symphony 5.5, NewsCutter 9.5, AJA IO Express, new DX Interface HBA, AIC Xtore storage, specified optimized Nvidia driver settings. Clarifications: Win7 Legacy Driver use for 1394 DNA products, O.S. utilization for Chelsio S310E-SR 10Gb HBA, Serial Deck Control, SAS connectivity (embedded SAS ports), Set Windows "Visual Effects" for best performance. Added O.S. setting recommendations for optimum performance with Avid Editing applications. Also, general updates and clarifications.
G	March 24th 2011	Joe Conforti	Removed all references to LSI 9200-8e SAS controller (not required because the XW8600 has embedded SAS controller). Added support for Xtore StudioRAID 5Ti, Clarified external SAS storage arrays supported via embedded SAS, Simplified chart on page 5

H	May 9th, 2011	Joe Conforti	For ISIS 3.2 or later ***(connected to ISIS 5000 only) with client running WinXP 32-bit O.S.*** - Move Intel PRO 1000 PT and PF to slot #5 (from slot #6). This change also requires Intel driver v14.7. This does not apply to ISIS 7000 connectivity. For ISIS 5000 / 7000 / ISIS 3.2 or later / and all O.S. client other than WinXP 32-bit, the Intel PRO 1000 PT and PF will remain in slot #6. SP1 for Win7 formally supported starting with M/C 5.5.2, Symphony 5.5.2, NewsCutter 9.5.2 releases